

## MILD ALE

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- Gravity **10.2 BLG**
- ABV **4.1 %**
- IBU **24**
- SRM **23**
- Style **Mild**

### Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.1 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **13.2 liter(s)**
- Total mash volume **17.2 liter(s)**

### Steps

- Temp **64 C**, Time **50 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **13.2 liter(s)** of strike water to **70.7C**
- Add grains
- Keep mash **50 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **16.9 liter(s)** of **76C** water or to achieve **26.1 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale ale Maris Otter	2 kg (50%)	81 %	6
Grain	Monachijski	1 kg (25%)	80 %	16
Grain	Karmelowy 150	0.5 kg (12.5%)	75 %	150
Grain	Pale Chocolate	0.5 kg (12.5%)	71 %	600

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Fuggles	30 g	60 min	4.5 %
Boil	Fuggles	20 g	30 min	4.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	Safale

### Extras

Type	Name	Amount	Use for	Time
Water Agent	Gips piwowarski	10 g	Mash	70 min